

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 7 (Canceled)

Claim 8 (Currently Amended): An optical semiconductor device comprising

an optical multilayer film that is located on a light incident plane or a light emitting plane of an optical semiconductor chip,

the optical multilayer film having a laminated structure that at least includes a first layer, a second layer containing titanium oxynitride as a main component, and a third layer containing magnesium fluoride as a main component, the first layer having a different refractive index from that of the second layer or the third layer, the third layer being most removed from the light incident plane or the light emitting plane,

the laminated structure having a plurality of reflection planes,

the thickness of the third layer being ~~smaller~~ less than $1/4$ of the wavelength of light incident to the light incident plane or of light emitting from the light emitting plane converted into an optical distance, and

tensile stresses and compressive stresses of the first, second, and third layers substantially canceling each other.

Claim 9 (Original): The optical semiconductor device as claimed in claim 8, wherein the first layer and the second layer are in contact with each other.

Claim 10 (Original): The optical semiconductor device as claimed in claim 8, wherein another layer is interposed between the first layer and the second layer.

Claim 11 (Original): The optical semiconductor device as claimed in claim 8, wherein: the first layer contains magnesium fluoride; and

the second layer is sandwiched by the first layer and the third layer.

Claim 12 (Original): The optical semiconductor device as claimed in claim 8, wherein the first layer contains silicon oxide as a main component.

Claim 13 (Original): The optical semiconductor device as claimed in claim 8, wherein the optical multilayer film is a reflection preventing film or a highly reflective film.

Claim 14 (Original): The optical semiconductor device as claimed in claim 8, wherein the second layer is a layer formed by ion-assisted deposition.

Claim 15 (Original): The optical semiconductor device as claimed in claim 8, wherein at least the light incident plane or the light emitting plane is sealed with resin.

Claim 16 (Currently Amended): An optical semiconductor device for use in a selected environment and sealable with a selected sealing material, comprising

an optical multilayer film that includes a plurality of layers having different refractive indices located on a light incident plane or a light emitting plane,

the optical multilayer film being able having a laminated structure to exhibit first optical reflection characteristics ~~that are obtained by causing~~ having a refractive index difference between an outermost layer and the ~~air or an inert gas~~ selected environment, and second optical reflection characteristics ~~that are obtained by not causing~~ having a refractive index difference between the outermost layer and a the selected sealing material ~~existing on the external side of the outermost layer~~, and

the first optical reflection characteristics of the multilayer film and the second optical reflection characteristics of the multilayer film being substantially the same,

wherein tensile stresses and compressive stresses of the ~~first, second, and third layers~~ of the optical multilayer film substantially cancel each other.

Claim 17 (Currently Amended): The optical semiconductor device as claimed in claim 16, wherein the first optical characteristics and the second optical characteristics both satisfy optical requirements of a case where ~~another~~ the selected sealing material is provided in contact with the external side of the outermost layer of the optical multilayer film.

Claim 18 (Currently Amended): The optical semiconductor device as claimed in claim 16, wherein the second optical reflection characteristics are obtained by providing resin as the selected sealing material in contact with the external side of the outermost layer of the optical multilayer film.

Claim 19 (Original): The optical semiconductor device as claimed in claim 16, wherein the optical multilayer film includes a layer that contains titanium oxynitride as a main component, and a layer that contains magnesium fluoride as a main component.

Claim 20 (Original): The optical semiconductor device as claimed in claim 8, further comprising a fourth layer having a refractive index higher than that of the first layer.